ABSTRACT OF THE DISCLOSURE

Interconnect assemblies and methods for forming and using them. In one example of the invention, an interconnect assembly comprises a substrate, a resilient contact element and a stop structure. The resilient contact element is disposed on the substrate and has at least a portion thereof which is capable of moving to a first position, which is defined by the stop structure, in which the resilient contact element is in mechanical and electrical contact with another contact element. In another example of the invention, a stop structure is disposed on a first substrate with a first contact element, and this stop structure defines a first position of a resilient contact element, disposed on a second substrate, in which the resilient contact element is in mechanical and electrical contact with the first contact element. Other aspects of the invention include methods of forming the stop structure and using the structure to perform testing of integrated circuits, including for example a semiconductor wafer of integrated circuits.